

AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for increasing the processing capability of a device, comprising:

requesting by a processor access to a module in a display controller;

processing continuously in the processor until notification ~~[[by]]~~ that the module in the display controller is available; ~~[[,]]~~

~~sending by wherein~~ a multiplexer in the display controller ~~sends a first an~~ available signal to a pin in the processor, the pin in the processor having a dual function, wherein one of the dual functions is to notify the processor that when the module is available; and

~~accessing by the processor~~ the module in the display controller after ~~receiving~~ sending the first available signal via the pin.

2. (Currently Amended) A method for increasing the processing capability of a device of claim 1, wherein requesting by a processor access to a module in a display controller includes transmitting ~~a second~~ an access request signal to the module in the display controller.

3. (Currently Amended) A method for increasing the processing capability of a device of claim 1, wherein processing continuously until notification by the module in the display controller includes checking the pin in response to the ~~first~~ available signal.

4. (Currently Amended) A method for increasing the processing capability of a device of claim 1, wherein ~~processing continuously until notification by the module in the display controller includes selecting a wait signal or a busy signal from the multiplexer to transmit the first signal~~ sending an available signal further includes,

sending a non-available signal to the pin in the processor while the module is not available,

wherein the multiplexer in the display controller selects either a wait signal or a busy signal to send to the pin in the processor.

wherein the multiplexer in the display controller sends the available signal to the pin when the multiplexer is selecting the busy signal and the busy signal indicates that the module is available.

5. (Currently Amended) A method for increasing the processing capability of a device of claim 4, ~~wherein selecting one of the wait signal and the busy signal from the multiplexer includes halting processing~~ accessing by the processor the module in the display further includes,

halting other processing by the processor and proceeding with the access to the module.

6. (Original) A method for increasing the processing capability of a device of claim 1, wherein requesting access to a module in a display controller further includes providing indirect addressing for communication.

7-17. (Cancelled)

18. (Currently Amended) A display controller configured to receive a first module request signal, comprising:

~~a plurality of first modules internal to the controller, the plurality of first modules being capable of accessing a plurality of second modules external to the controller;~~

a combinatorial multiplexer that selects one of the modules in the plurality of modules;

~~[[a]] an input/output (I/O) multiplexer coupled to the~~ selecting either a wait signal or a busy signal received from the combinatorial multiplexer, the busy signal indicating whether the selected module by the combinatorial multiplexer is available ~~plurality of first modules via a combinatorial multiplexer, the multiplexer being capable of transmitting a second signal to a pin by selecting one of a wait signal and a busy signal in the multiplexer in response to the first signal; and~~

a connector transmitting the output of the I/O multiplexer to a pin in a processor, the pin in the processor having a dual function, wherein one of the dual functions is to notify the processor that the module is available ~~coupled to the~~

~~multiplexer and the pin, the connector being capable of transmitting the second signal to a source of the first signal.~~

19. (Currently Amended) A display controller configured to receive a first module request signal of claim 18, wherein the busy signal propagates via the connector.

20. (Currently Amended) A display controller configured to receive a first module request signal of claim 18, wherein the first module request signal is either a transmission requesting one of read and or a write access request for one of the modules in to the plurality of first modules.

21. (Cancelled)

22. (Currently Amended) A display controller configured to receive a first module request signal of claim 18,

wherein a module request signal is sent by a processor to the display controller to request access to a requested module in the plurality of modules.

wherein the busy signal indicates whether the requested module is available~~a first selector is capable of selecting one of a wait signal and a busy signal in the multiplexer.~~

23. (Currently Amended) A display controller configured to receive a first module request signal of claim ~~[[18]]~~ 22, wherein the connector indicates to the processor that the requested module is available when the busy signal indicates that the requested module is available and the I/O multiplexer selects the busy signal ~~a second selector in the combinatorial multiplexer is capable of selecting a module from the plurality of first modules.~~

24. (Currently Amended) A display controller configured to receive a first module request signal of claim ~~[[18]]~~ 23, wherein the processor is continuously processing until the pin in the processor indicates that the requested module is available ~~the source of the first signal is a processor continuously processing.~~

25. (Currently Amended) A display controller configured to receive a first module request signal of claim ~~[[18]]~~ 22, wherein the source processor communicates via indirect addressing.